

EXHIBIT “C”

Robert Scott Cowan, MD
December 16, 2008

Page 1

COURT OF COMMON PLEAS

PHILADELPHIA COUNTY - CIVIL DIVISION

DOCKET NO. 02389

GEOFFREY CROWTHER,

Plaintiff,

Vs.

CONSOLIDATED RAIL CORPORATION

and CSX TRANSPORTATION, INC.,

Defendants.

DEPOSITION OF ROBERT SCOTT COWAN, M.D.

New England Orthopedic Surgeons

300 Birnie Avenue

Springfield, Massachusetts

December 16, 2008 5:20 p.m.

Jonathan P. Lodi

Court Reporter

CATUOGNO COURT REPORTING & STEN-TEL TRANSCRIPTION
Springfield, MA Worcester, MA Boston, MA Lawrence, MA Providence, MA

dc0b73ff-8352-4ff1-995f-dfec308d8c6b

Robert Scott Cowah, MD
December 16, 2008

Page 6	Page 8
<p>1 went into an orthopedic residency program, 2 starting with a surgical internship, at the St. 3 Elizabeth's Hospital in Boston, and then the 4 orthopedic portion was the Boston University 5 affiliated hospitals. That ended in 1983. 6 Afterwards I did a fellowship in spinal surgery at 7 the New England Baptist Hospital.</p> <p>8 Q. And how long have you been at this 9 practice?</p> <p>10 A. Fourteen years.</p> <p>11 Q. And are you board certified?</p> <p>12 A. Yes.</p> <p>13 Q. And what's your board in?</p> <p>14 A. Orthopedic surgery.</p> <p>15 Q. And when did you obtain certification?</p> <p>16 A. 1996.</p> <p>17 Q. Did you have to retake the test?</p> <p>18 A. I recertified ten years later.</p> <p>19 Q. And have you conducted any research in 20 the area of repetitive stress injuries or 21 cumulative trauma disorders?</p> <p>22 A. No.</p> <p>23 Q. And have you had a past experience as 24 an expert witness?</p>	<p>1 Q. State court or Federal?</p> <p>2 A. State.</p> <p>3 Q. And do you recall the type of case 4 that was?</p> <p>5 A. A woman fell off a porch.</p> <p>6 Q. And do you recall what the outcome of 7 that case was?</p> <p>8 A. They found for the plaintiff.</p> <p>9 Q. Have you ever been excluded or not 10 permitted to give your full opinions in any court?</p> <p>11 A. No.</p> <p>12 Q. Do you have any connection with the 13 railroad industry?</p> <p>14 A. I don't.</p> <p>15 Q. Okay. So no friends, family, or any 16 other connection?</p> <p>17 A. No.</p> <p>18 Q. And, Doctor, it's my understanding 19 that you've authored a report in this case, dated 20 November 9th, 2008, which is marked as Exhibit 2, 21 is that correct?</p> <p>22 A. Yes.</p> <p>23 Q. And one of the things I noted was that 24 – or at least on the copy that I received – is</p>
Page 7	Page 9
<p>1 A. Yes.</p> <p>2 Q. Can you tell me the type of cases that 3 you've served in as an expert?</p> <p>4 A. Auto accident cases, medical 5 malpractice cases, and Workers' Compensation 6 cases.</p> <p>7 Q. Have you ever – is this your first 8 railroad case?</p> <p>9 A. Yes.</p> <p>10 Q. And the auto accident cases, was that 11 primarily for your patient, or was that as a 12 defense medical expert?</p> <p>13 A. Primarily for patients.</p> <p>14 Q. And the medical malpractice, is that 15 for the defense?</p> <p>16 A. Yes.</p> <p>17 Q. And the Workers' Compensation would be 18 probably for your patients?</p> <p>19 A. Yes.</p> <p>20 Q. And have you ever testified live, in 21 court?</p> <p>22 A. Yes.</p> <p>23 Q. And where have you testified?</p> <p>24 A. In Springfield.</p>	<p>1 that it wasn't signed. Is your copy signed?</p> <p>2 A. My copy is not signed.</p> <p>3 Q. Is there anything – have you had a 4 chance to review the report in advance of your 5 deposition?</p> <p>6 A. I did.</p> <p>7 Q. And did you meet with Mr. Joyce today?</p> <p>8 A. I did.</p> <p>9 Q. I'm sorry?</p> <p>10 A. I did.</p> <p>11 Q. And what did you guys talk about?</p> <p>12 A. We talked about this report. We 13 talked about what I might expect from this 14 deposition.</p> <p>15 Q. And what were you told in that regard?</p> <p>16 A. That we would discuss causality. That 17 we would discuss, possibly, statutes of 18 limitations. That we would discuss disability.</p> <p>19 Q. And what was the discussion about 20 disability?</p> <p>21 A. The extent of disability for this 22 patient.</p> <p>23 Q. And how about the statute of 24 limitations?</p>

3 (Pages 6 to 9)

CATUOGNO COURT REPORTING & STEN-TEL TRANSCRIPTION
 Springfield, MA Worcester, MA Boston, MA Lawrence, MA Providence, MA

dc0b73ff-8352-4ff1-995f-dfec308d8c6b

Robert Scott Cowah, MD
December 16, 2008

Page 10	Page 12
<p>1 A. Whether or not it had any bearing on 2 this case.</p> <p>3 Q. And did it have any bearing in the 4 course of your conversations?</p> <p>5 A. No.</p> <p>6 Q. What were you specifically told about 7 the statute of limitations?</p> <p>8 A. That there's a time period of two to 9 three years that a worker would have to file a 10 claim with respect to a given injury.</p> <p>11 Q. Anything else?</p> <p>12 A. No.</p> <p>13 Q. Was there a discussion about whether 14 or not Mr. Crowther had met that criteria, that he 15 filed a common claim?</p> <p>16 A. Yes, we did discuss that he had filed 17 a claim. And it was my opinion that that claim 18 was within the statute of limitations, based on 19 the knowledge I have of his injury.</p> <p>20 Q. And have you reviewed any outside 21 medical records involving Mr. Crowther?</p> <p>22 A. No.</p> <p>23 Q. And what was the discussion about 24 causality?</p>	<p>1 A. Yes.</p> <p>2 Q. How much were you paid?</p> <p>3 A. For the narrative report, \$500.</p> <p>4 Q. And, excuse me, are there any other 5 drafts of this report?</p> <p>6 A. I don't recall any other drafts.</p> <p>7 Q. Did you receive any other 8 communications from Mr. Joyce after you did your 9 narrative report?</p> <p>10 A. I don't recall any other 11 communications.</p> <p>12 Q. Can you tell me what you did to 13 review, to come to your opinions and conclusions 14 that are set forth in your report?</p> <p>15 A. I reviewed my office notes.</p> <p>16 Q. Did you do anything else?</p> <p>17 A. I reviewed the AMA guidelines to 18 permanent impairment.</p> <p>19 Q. But you didn't review Mr. Crowther's 20 deposition or any of the other file materials 21 exchanged between the parties, is that accurate?</p> <p>22 A. That's accurate.</p> <p>23 Q. And you've not seen any other outside 24 medical records from any other provider, is that</p>
<p style="text-align: center;">Page 11</p> <p>1 A. It largely centered on an injury that 2 would occur as a result of cumulative trauma, as 3 opposed to a single event.</p> <p>4 Q. And was there any other discussion 5 about any other topics?</p> <p>6 A. No. Just, you know, what I've 7 discussed.</p> <p>8 Q. And Exhibit 2, which is your report, 9 does it contain all of your opinions in this case?</p> <p>10 A. Yes.</p> <p>11 Q. Were there any opinions that were not 12 in the report, that were discussed between you and 13 Mr. Joyce?</p> <p>14 A. No.</p> <p>15 Q. And the fact that it's not signed, is 16 that signify to you, at all? I mean, do you stand 17 by what's written?</p> <p>18 A. I stand by it.</p> <p>19 Q. Even under the — and maybe this is 20 peculiar to Massachusetts, but under the pains and 21 penalties of perjury?</p> <p>22 A. Yes.</p> <p>23 Q. And were you paid for the narrative 24 report?</p>	<p style="text-align: center;">Page 13</p> <p>1 true?</p> <p>2 A. I have not.</p> <p>3 Q. And in your report — oh, and I'm 4 sorry. Let me back up. And you didn't do any 5 literature review?</p> <p>6 A. I did not.</p> <p>7 Q. And, sir, you'd agree that you're not 8 an ergonomist; would you agree with that?</p> <p>9 A. I'd agree to that.</p> <p>10 Q. And you're not an occupational 11 medicine doctor?</p> <p>12 A. I am not.</p> <p>13 Q. And occupation medicine doctor is a 14 field of specialty in which those types of doctors 15 focus on causality and work-related issues?</p> <p>16 A. Yes.</p> <p>17 Q. And would you agree that you're a 18 treating physician and that your day-to-day job is 19 to treat patients and conduct surgeries?</p> <p>20 A. Correct.</p> <p>21 Q. And that you don't do forensic 22 determinations on causation on a routine basis?</p> <p>23 A. Not on a routine basis.</p> <p>24 Q. So you don't hold yourself out as a</p>

4 (Pages 10 to 13)

Robert Scott Cowah, MD
December 16, 2008

<p style="text-align: center;">Page 14</p> <p>1 forensic causality expert, do you?</p> <p>2 A. I don't.</p> <p>3 Q. And you don't hold yourself out as a specialist in the area of occupationally-related injuries, is that true as well?</p> <p>4 A. Well, I treat a lot of occupational injuries. I have a sizable Worker's Comp. patient population, and so I'm asked my opinion on causality often. What constitutes an expert I suppose is variable.</p> <p>5 Q. Well, what percentage of your practice, for instance, do you devote to doing forensic determinations of causation?</p> <p>6 A. Well, it would be quite small. That would be, probably, five -- less than ten percent of what I do, five or ten percent.</p> <p>7 Q. Can you tell me what information, if any, you received about Mr. Crowther's job and his job duties at the Railroad?</p> <p>8 A. Mr. Crowther discussed with me his job duties as part of his intake history and physical examination.</p> <p>9 Q. And what did he tell you?</p> <p>10 A. Well, essentially what I wrote in my</p>	<p style="text-align: center;">Page 16</p> <p>1 A. No.</p> <p>2 Q. What, if anything, did you do to confirm with Mr. Crowther that this was correct information that was contained in Mr. Joyce's letter?</p> <p>3 A. Well, in the history obtained by Mr. Crowther, I, once again, was described what he did for work, which was important to my evaluation of his case and his condition. And to the extent that correlated with what doctor or -- I'm sorry -- with what Mr. Joyce said, I put it in a letter.</p> <p>4 Q. Which note would correlate or confirm the information that's in Mr. Joyce's letter?</p> <p>5 A. Well, it's not -- it's on an intake form that I don't have with me.</p> <p>6 Q. So there are file materials that are out there, that haven't been brought?</p> <p>7 A. Correct.</p> <p>8 Q. Do you have access to those or --</p> <p>9 A. Physically, no.</p> <p>10 Q. And so do you -- on this intake form, which I would ask to get a copy of, because we sent out authorizations for the release of medical records, to your practice, and I never got an</p>
<p style="text-align: center;">Page 15</p> <p>1 letter, which is that he was employed for thirty-one years as a track laborer; that he stated his duties were heavy manual labor, welding, repairing railroad tracks; and then described repetitive strenuous motion, vibration, awkward postures, heavy lifting, and loading.</p> <p>2 Q. Okay. Is that what Mr. Crowther told you; did he tell you, in his words, that he did heavy manual labor and was exposed to repetitive strenuous motion, vibration, awkward postures; I mean, were those his words?</p> <p>3 A. That was probably my interpretation of what he was telling me.</p> <p>4 Q. Did you lift any of the language from -- and I mean that in the nature in which it's intended. Did you borrow any of the language from Mr. Joyce's letter? because it looks like that very paragraph is --</p> <p>5 A. Yes. So I'm sure I did.</p> <p>6 Q. So the basic idea of the job duties was taken from Mr. Crowther's lawyer --</p> <p>7 MR. JOYCE: Objection.</p> <p>8 Q. (By Mr. Hall) -- in his letter, is that accurate?</p>	<p style="text-align: center;">Page 17</p> <p>1 intake form. I'm not sure why, but -- so it's your understanding that on there there would be information about his specific job duties?</p> <p>2 A. It's been a long time since I've seen it. But I think so.</p> <p>3 Q. When was the last time you think you saw it?</p> <p>4 A. Probably at the time of his evaluation. I'd have no reason to look at it prior to. That would be January 27th, 2006.</p> <p>5 Q. Well, can you tell me the specific things that he did as a welder that exposed him to repetitive strenuous motion?</p> <p>6 A. As a welder?</p> <p>7 Q. How about a heavy-duty manual -- I'm sorry. How about as a track laborer? I apologize.</p> <p>8 A. As a track laborer?</p> <p>9 Q. Yes. What were the specific job duties that you believe exposed him to repetitive strenuous motion or awkward postures or any of the other things that are listed in the second paragraph of your letter?</p> <p>10 A. Well, I would think any type of track</p>

Robert Scott Cowah, MD
December 16, 2008

Page 18	Page 20
<p>1 repair would be repetitive and strenuous.</p> <p>2 Q. Have you ever seen track repair being</p> <p>3 done?</p> <p>4 A. No, I haven't.</p> <p>5 Q. And fair to say you haven't gone out</p> <p>6 and looked at what Mr. Crowther did?</p> <p>7 A. No.</p> <p>8 Q. And you've never examined any of his</p> <p>9 work conditions?</p> <p>10 A. No.</p> <p>11 Q. And Mr. Joyce hasn't provided you with</p> <p>12 any videotape of a person repairing track?</p> <p>13 A. Correct.</p> <p>14 Q. And you've not seen any sort of</p> <p>15 scientific analysis of the exposure he had on his</p> <p>16 job, right?</p> <p>17 A. Correct.</p> <p>18 Q. And I think you previously stated that</p> <p>19 the description of what he did for his work would</p> <p>20 be important, and that you obtained that in your</p> <p>21 history, and that it would be important to your</p> <p>22 conclusion, is that correct, or your opinions?</p> <p>23 A. Correct.</p> <p>24 Q. And so if in fact Mr. Crowther's job</p>	<p>1 work tasks, would be in a better position to</p> <p>2 determine causation?</p> <p>3 MR. JOYCE: Objection.</p> <p>4 THE WITNESS: Well, depending on who</p> <p>5 that person is. I mean, are you talking</p> <p>6 about a physician or --</p> <p>7 Q. (By Mr. Hall) How about a board</p> <p>8 certified occupational medicine doctor; would that</p> <p>9 person, after reviewing the job tasks, be in a</p> <p>10 better position?</p> <p>11 MR. JOYCE: As opposed to somebody</p> <p>12 that's treated the patient and examined him?</p> <p>13 Did you have somebody in mind or are</p> <p>14 you just speaking generally?</p> <p>15 MR. HALL: Do you have an objection?</p> <p>16 MR. JOYCE: Yes, I have an objection.</p> <p>17 MR. HALL: Okay. Then it's noted for</p> <p>18 the record. You can answer.</p> <p>19 THE WITNESS: Yes. I think that the</p> <p>20 -- that it would depend on that doctor's</p> <p>21 familiarity with the patients, in addition</p> <p>22 to his familiarity with the job.</p> <p>23 Q. (By Mr. Hall) Well, would you agree</p> <p>24 that a person who is board certified or trained in</p>
<p>1 turned out not to be as described in Mr. Joyce's</p> <p>2 letter, would you agree that that would affect the</p> <p>3 outcome of your opinion?</p> <p>4 MR. JOYCE: Objection.</p> <p>5 THE WITNESS: If Mr. Crowther's job</p> <p>6 was considerably easier than described in</p> <p>7 either this letter or by the patient, yes.</p> <p>8 Q. (By Mr. Hall) Okay. And so if Mr.</p> <p>9 Crowther, for instance, worked at a safe and</p> <p>10 comfortable pace, was able to take breaks, and was</p> <p>11 not exposed to repetitive strenuous activity and</p> <p>12 sustained awkward postures, then that could change</p> <p>13 the outcome of your opinion, is that correct?</p> <p>14 A. It could be true, yes.</p> <p>15 Q. And you would agree that you don't</p> <p>16 know how much time of the day he spent doing any</p> <p>17 activity at work, is that correct?</p> <p>18 A. That's correct.</p> <p>19 Q. And you've never personally quantified</p> <p>20 his exposure to any potential risk factors at</p> <p>21 work, is that true?</p> <p>22 A. Correct.</p> <p>23 Q. And would you agree that someone who</p> <p>24 evaluated his actual work tasks, or representative</p>	<p>1 occupational medicine, who has reviewed videotape</p> <p>2 of representative job tasks, and who has been to</p> <p>3 railroad sites and has seen the work being done</p> <p>4 personally would be in a better position to</p> <p>5 determine whether or not those job duties caused</p> <p>6 or contributed to the development of a person's</p> <p>7 problems?</p> <p>8 MR. JOYCE: Objection.</p> <p>9 Q. (By Mr. Hall) Would you agree with</p> <p>10 that?</p> <p>11 A. If they'd examined the patient.</p> <p>12 Q. And is the examination of the patient</p> <p>13 -- why is that critical; wouldn't it be reasonable</p> <p>14 for a doctor to review -- to rely on your physical</p> <p>15 examination and notes?</p> <p>16 A. Yes, that would be reasonable.</p> <p>17 Q. And so if a board certified</p> <p>18 occupational medicine doctor reviewed your medical</p> <p>19 notes and those of your partners and actually did</p> <p>20 an analysis of the work duties that Mr. Crowther</p> <p>21 had done, you would agree that that person would</p> <p>22 be in a better position to determine causality?</p> <p>23 MR. JOYCE: Objection.</p> <p>24 THE WITNESS: Yes.</p>

6 (Pages 18 to 21)

CATUOGNO COURT REPORTING & STEN-TEL TRANSCRIPTION
Springfield, MA Worcester, MA Boston, MA Lawrence, MA Providence, MA

dc0b73ff-8352-4ff1-995f-dfec308d8c6b

Robert Scott Cowah, MD
December 16, 2008

Page 22	Page 24
<p>1 Q. (By Mr. Hall) Is there any other 2 information that you received or reviewed in 3 regards to Mr. Crowther's job? 4 A. No. 5 Q. Did you evaluate his avocational 6 activities in coming to your conclusions? 7 A. No. 8 Q. And you'd agree, sir, that you're not 9 familiar with railroad operations? 10 A. Yes. 11 Q. And you'd agree that in your letter, 12 in your narrative report, that you've not 13 suggested that there are any specific changes to 14 Mr. Crowther's job that has been scientifically 15 demonstrated or would otherwise be – reasonably 16 anticipated to be preventive of his neck issues? 17 MR. JOYCE: Objection. That's not the 18 purpose of Dr. Cowan's participation in 19 Mr. Crowther's case. 20 THE WITNESS: I don't understand the 21 question. 22 MR. JOYCE: He's not our liability 23 expert, Steve, and you know that. He's a 24 medical doctor, treating physician, surgeon,</p>	<p>1 Q. And what are the risk factors for the 2 development of degenerative disk disease in the 3 neck? 4 A. Genetic predisposition or neck- 5 strenuous manual labor. 6 A. That's probably it. 7 Q. How about age; is age a risk factor? 8 A. Relative. Everybody develops 9 degenerative changes over time, so I suppose so. 10 Q. Are there any other risk factors for 11 the development of degenerative disk disease or 12 arthritis? 13 A. Deformity. 14 Q. Deformity? Anything else? 15 A. That would be the bulk of it. 16 Q. And can you tell me which of the risk 17 factors you ruled out, if any? 18 A. Deformity, trauma, genetics. 19 Q. You didn't rule out age? 20 A. No. He's at an age where, certainly, 21 they're fairly predominant. 22 Q. Okay. I'm sorry. And I just want to 23 – maybe I just didn't hear you, but he's at an 24 age where it's not unusual for him to have</p>
<p>1 expert medical witness. He's not a 2 liability witness. We have a different 3 liability witness to address that issue. 4 MR. HALL: Okay. Well, I'm just 5 asking him if he has an opinion. 6 Q. (By Mr. Hall) Would you agree that 7 you've not given any opinions that there were any 8 specific changes to Mr. Crowther's job that could 9 have been done by the Railroad that would have 10 prevented his injury? 11 A. Correct. I gave no such opinions. 12 Q. And you hold no such opinion as you 13 sit here today? 14 A. I hold no such opinion. 15 Q. Okay. And, I'm sorry, I think we 16 covered you hadn't reviewed any of the literature 17 regarding the causes of Mr. Crowther's 18 degenerative disk disease, is that correct, in 19 preparation for your report? 20 A. Correct. 21 Q. And do you hold yourself out as an 22 expert in the area of causes of degenerative 23 diseases of the neck? 24 A. Yes.</p>	<p>1 degenerative joint disease in his neck? 2 A. Correct. 3 Q. And so we can agree that his age 4 contributed at least in part to the development of 5 his degenerative disk disease, is that correct? 6 A. Yes. 7 Q. And if you take his job out of the 8 equation, he could have went on to develop the 9 exact same condition he had just – back up. 10 If we take his job out of the 11 equation, isn't it true that he could have went on 12 to develop the same exact degenerative process in 13 his neck that resulted in his surgery? 14 A. Yes. 15 Q. And is there any way to attribute 16 whether or not his surgery was due to a function 17 of age more than a function of his job? 18 MR. JOYCE: Objection. 19 THE WITNESS: Based on chronology of 20 symptoms. 21 Q. (By Mr. Hall) When did he begin to 22 develop signs or symptoms of degenerative disk 23 disease? 24 A. His complaints of neck injury or arm</p>

7 (Pages 22 to 25)

Robert Scott Cowah, MD
December 16, 2008

Page 26	Page 28
<p>1 pain started just prior to evaluation by Dr. 2 Wenner for his thumb condition, which would have 3 been late in 2005.</p> <p>4 Q. And so based on the fact that he began 5 to have neck pain, according to your file, in 6 2005, how is that significant? I'm sorry. Maybe 7 I'm not picking it up.</p> <p>8 A. Well, there comes a point in the 9 patient's degenerative disk process where it 10 becomes symptomatic. And in this case, that was 11 2005. The patient was fifty-four years of age. 12 He had been working on the Railroad, at that 13 point, for thirty-odd years. And can I 14 differentiate exactly whether it was age-related 15 or job-related? No. But it was my opinion that 16 it would be a combination of the two.</p> <p>17 Q. Okay. So fifty/fifty?</p> <p>18 MR. JOYCE: Objection. There's no 19 reason for apportionment or allocation. 20 There's no requirement to do it. Note my 21 objection.</p> <p>22 Q. (By Mr. Hall) Is it your opinion it 23 was fifty/fifty?</p> <p>24 A. Sure.</p>	<p>1 to -- I'm just trying to imagine stooped. 2 Is that knees bent all the way down 3 and lifting from the ground up; is that what you 4 mean?</p> <p>5 A. No. Stooped just means bent at the 6 waist.</p> <p>7 Q. Just bent at the waist. Okay. And 8 it's not just being bent at the waist; it's 9 lifting?</p> <p>10 A. Correct.</p> <p>11 Q. And do you have any information about 12 how often Mr. Crowther would bend at his waist and 13 do lifting?</p> <p>14 A. No.</p> <p>15 Q. Are there any other things that fall 16 under the category of neck-strenuous manual labor?</p> <p>17 A. Labor requiring repetitive rotation of 18 the neck.</p> <p>19 Q. And what does that mean?</p> <p>20 A. Repetitive rotations, rotating from 21 one side to the other, lateral rotation.</p> <p>22 Q. Moving your neck left and right?</p> <p>23 A. Yes.</p> <p>24 Q. Up and down?</p>
Page 27	Page 29
<p>1 Q. And is it unusual for someone in, say, 2 the fifth decade of life to have degenerative 3 changes in their neck as a result of age?</p> <p>4 A. No. It's fairly common.</p> <p>5 Q. It's fairly common? Is it, like, 6 fifty, sixty, seventy, eighty percent of the 7 population who have degenerative changes?</p> <p>8 A. Sixty.</p> <p>9 Q. Sixty percent, at the fifth decade of 10 life?</p> <p>11 A. Yes.</p> <p>12 Q. And I think you said -- when I asked 13 you about the personal risk factors, I think you 14 said -- and I'm trying to check my notes -- but 15 manual neck labor; is that -- and I apologize. I 16 had manual labor, neck, stress.</p> <p>17 What is manual labor that involves 18 stressing of the neck; can you describe that for 19 me?</p> <p>20 A. It would be anything done in a stooped 21 position. Anything requiring lifting from a 22 stooped position.</p> <p>23 Q. And so -- and does it have to be 24 sustained a certain amount of time or does it have</p>	<p>1 A. Up and down's more covered with the 2 first one, but --</p> <p>3 Q. Okay. And does the rotation of neck 4 have to go to any certain degree in order to be 5 problematic or --</p> <p>6 A. No, it just has to be sustained over 7 years.</p> <p>8 Q. And when you say, "repetitive," I 9 mean, what's the cycle have to be in order for it 10 to be repetitive?</p> <p>11 A. I'm not sure I understand the 12 question.</p> <p>13 Q. Okay. For it to qualify -- I mean, I 14 can rotate my neck; I can look back and forth; but 15 what's the cycle time for it to be classified as 16 repetitive, in your opinion?</p> <p>17 A. I would say if you're rotating back 18 and forth on a routine basis, four or five times a 19 minute, over the course of a workday.</p> <p>20 Q. And do you have any specific 21 information about Mr. Crowther --</p> <p>22 A. No.</p> <p>23 Q. Okay. -- in that regard?</p> <p>24 A. No.</p>

Robert Scott Cowah, MD
December 16, 2008

Page 30	Page 32
<p>1 Q. Anything else that falls into the 2 category of repetitive manual neck labor? 3 A. Well, any actual lifting with the 4 neck, which I'm not sure he would encounter. 5 Q. So as far as you know, that's not a 6 personal risk factor for him because he didn't 7 have lifting with his neck? 8 A. He didn't describe any. 9 Q. Is that like putting water on your 10 head and walking with it? 11 A. You know who does that are guys who 12 put in the windshields because they have to push 13 with their head and their hands at the same time. 14 Q. There's none of that, that you know 15 of, in his railroad — 16 A. I don't know of any. 17 Q. Any other risk factors that we haven't 18 already talked about with regard to repetitive 19 neck or, I'm sorry, manual intensive neck, in that 20 area that we've been talking about? 21 A. Neck-strenuous labor. 22 Q. Neck-strenuous labor. Thank you. 23 A. No. 24 Q. And so to the extent that he was not</p>	<p>1 neck-strenuous labor is required to produce 2 injury? 3 A. It varies from person to person. 4 Q. Is there any way to predict whether or 5 not someone who does neck-strenuous labor is going 6 to develop degenerative disk disease of the neck 7 because of that neck-strenuous labor? 8 A. No. 9 Q. Is there any way to prevent the 10 development of degenerative disk disease in the 11 neck, irrespective of work? 12 MR. JOYCE: Objection. 13 THE WITNESS: No. 14 Q. (By Mr. Hall) The aging process is 15 pretty hard on the body and on our disks and our 16 vertebrae, right? 17 A. It can be. 18 Q. It can be. And you'd agree, sir, that 19 you don't hold yourself out as an expert in the 20 work-related literature that deals with the 21 degenerative disk disease; would you agree with 22 that? 23 MR. JOYCE: Objection. 24 THE WITNESS: Work-related literature?</p>
Page 31	Page 33
<p>1 exposed to neck-strenuous labor, that would be a 2 good thing, is that correct? 3 A. Correct. 4 Q. And if a qualified person like an 5 ergonomist went out to review the job and analyze 6 the type of activities that were done by someone 7 like Mr. Crowther and they came to the conclusion 8 that the job does not contain tasks that contain 9 neck-strenuous labor, would that alter your 10 opinion? 11 MR. JOYCE: Objection. Is it a 12 hypothetical; are you asking him to 13 speculate here? 14 Q. (By Mr. Hall) Would that change your 15 opinion? 16 MR. JOYCE: Note my objection. 17 THE WITNESS: It could. 18 Q. (By Mr. Hall) And so if in fact the 19 job did not contain a significant amount of 20 neck-strenuous labor, that would change your 21 opinion in fact, wouldn't it, sir? 22 MR. JOYCE: Objection. 23 THE WITNESS: It could. 24 Q. (By Mr. Hall) And how much</p>	<p>1 Q. (By Mr. Hall) Yes. The literature 2 that — the scientific literature that deals with 3 work relatedness in the development of neck 4 issues. Would you agree that you don't hold 5 yourself out as an expert in that body of 6 literature? 7 MR. JOYCE: Objection. 8 THE WITNESS: Correct. 9 Q. (By Mr. Hall) Okay. And are you 10 aware of any valid studies that have been done 11 associating Mr. Crowther's work duties at the 12 Railroad with the development of degenerative disk 13 disease of the neck? 14 A. Say that again. 15 Q. Sure. Are you aware of any valid 16 studies that have been associating Mr. Crowther's 17 work duties with the development of degenerative 18 disk disease in the neck? 19 A. No. 20 Q. And we can agree, sir, that there is 21 no valid recognized dose response relationship 22 between neck-strenuous labor and the development 23 of degenerative disk disease in the neck, is that 24 true?</p>

9 (Pages 30 to 33)

CATUOGNO COURT REPORTING & STEN-TEL TRANSCRIPTION
 Springfield, MA Worcester, MA Boston, MA Lawrence, MA Providence, MA

dc0b73ff-8352-4ff1-995f-dfec308d8c6b

Robert Scott Cowah, MD
December 16, 2008

Page 34	Page 36
1 A. Correct.	1 see that you came to any opinion that his job
2 Q. And that's really what we're dealing	2 duties accelerated or aggravated Mr. Crowther's
3 with in Mr. Crowther's case, is he had	3 actual disease process, is that true?
4 degenerative disk disease in his neck, correct?	4 MR. JOYCE: Are you asking him whether
5 A. Right.	5 his job aggravated or worsened the
6 Q. And you would agree that, in coming to	6 degenerative disk disease; is that your
7 a conclusion on causation, that it's important to	7 question?
8 review as much information as you can; would you	8 MR. HALL: You can answer the
9 agree with that?	9 question.
10 A. Correct.	10 THE WITNESS: I could not say whether
11 Q. And did you ask Mr. Crowther if he had	11 -- I could say that it rendered it more
12 any issues in terms of trauma associated with his	12 symptomatic. Is that what you're asking?
13 neck?	13 I'm not sure what you're asking.
14 A. Yes.	14 Q. (By Mr. Hall) Okay. As you sit here
15 Q. And what did he tell you?	15 today, you don't have an opinion, within a
16 A. He did not.	16 reasonable degree of medical certainty, and under
17 Q. And can we agree that once somebody	17 the pains and penalties of perjury, as set forth
18 develops degenerative disk disease of the neck --	18 in your report, that his job actually increased
19 my neck just cracked. Sorry.	19 the disease process in his neck?
20 Can we agree that once somebody has	20 MR. JOYCE: Objection.
21 degenerative disk disease in their neck and it	21 THE WITNESS: I did not render an
22 becomes symptomatic that, really, any use of the	22 opinion there, correct.
23 neck or head can produce symptoms?	23 Q. (By Mr. Hall) And you don't have such
24 A. It can.	24 an opinion within a reasonable degree of medical
Page 35	Page 37
1 Q. And it doesn't necessarily have to be	1 certainty and under the pains and penalties of
2 neck-strenuous labor in order to do that, right?	2 perjury?
3 A. Correct.	3 A. Presently?
4 Q. It could just be simply turning your	4 Q. Yes.
5 head could produce symptoms?	5 A. I do think his job duties aggravated
6 A. Yes.	6 his underlying cervical degenerative disk disease,
7 Q. And can we agree, sir, that there's a	7 yes.
8 difference between the concept of activity-	8 Q. Aggravated his symptoms or actually
9 exacerbating symptoms with the concept of an	9 aggravated the underlying disease process; in
10 actual increase in the disease process?	10 other words, do you have any objective scientific
11 A. I'm sorry. Once more.	11 evidence to show that his job duties at the
12 Q. Yes. I'm just trying to figure out,	12 Railroad actually increased the disease process?
13 can we agree that someone can be symptomatic,	13 MR. JOYCE: He just said that's his
14 maybe they turned their head and they turned their	14 opinion.
15 neck and they produced the symptoms, that being	15 THE WITNESS: That's my -- my opinion
16 one concept; and would you agree that that doesn't	16 is that it did. But do I have repetitive
17 necessarily mean that the disease process is	17 MRIs showing a progression? No, I don't.
18 changing?	18 Q. (By Mr. Hall) Okay. Do you have any
19 A. I agree with that.	19 diagnostic studies showing a comparison?
20 Q. So you can have symptoms without	20 A. No.
21 necessarily increasing the disease process,	21 Q. And do you have any objective
22 correct?	22 scientific evidence to make that conclusion?
23 A. Correct.	23 A. I don't, no. It's my opinion.
24 Q. And in reading your report, I don't	24 Q. And what's the basis for that opinion?

10 (Pages 34 to 37)

Robert Scott Cowah, MD
December 16, 2008

Page 38		Page 40	
1	You've not seen his job. I mean, what is the	1	Q. And the MRI that you took was February
2	basis for that opinion?	2	of 2006, is that right? Do you have a copy of
3	A. I based that opinion, A, that he has a	3	that?
4	degenerative disk disease process going on based	4	A. March. March 1, 2006. That's what I
5	on MRIs that I was able to visualize; and, second,	5	have.
6	that, in my opinion, the work that he described	6	Q. I have an exam date of 2/8/06. And it
7	were work duties that I considered to be	7	was signed -- can I see where you're getting the
8	aggravating to a cervical degenerative disk	8	date from? You only sent him out once, is that
9	disease process.	9	right?
10	Q. If that was true, then why didn't you	10	A. Correct.
11	put that in your report?	11	Q. For an MRI?
12	A. I did. Mr. Crowther sustained	12	A. Yes.
13	cumulative micro-trauma to his neck as a result of	13	Q. And that was Dr. Deborah Green?
14	strenuous labor on the Railroad over thirty years.	14	A. Yes.
15	Q. When I read that, I saw that that was	15	Q. So the exam date was 2/8 of '06. Can
16	your opinion, that his job duties caused the	16	we agree on that?
17	underlying degenerative disk disease.	17	A. Yes.
18	A. No.	18	Q. And do you have that in front of you,
19	Q. So that's not your opinion?	19	the MRI? Can I take a look at it? This is the
20	A. No.	20	only copy I have.
21	Q. So we can agree that his job duties	21	A. I don't have a copy of it.
22	did not cause the underlying degenerative disk	22	Q. Do you mind if I walk around and we
23	disease?	23	can look at it together?
24	MR. JOYCE: Objection.	24	MR. JOYCE: I have a copy, if you want
Page 39		Page 41	
1	THE WITNESS: That's correct.	1	it.
2	Q. (By Mr. Hall) And so, what this	2	MR. HALL: You have a copy of it?
3	paragraph is saying is that -- if I understand	3	MR. JOYCE: Yes.
4	correctly, based on what you just told me -- is	4	Q. (By Mr. Hall) Okay. And we're
5	that his job duties may have accelerated the	5	referring, for the record, to the MRI Center
6	otherwise non-work-related degenerative disk	6	2/8/06 MRI done of Mr. Crowther's cervical spine,
7	disease, is that correct?	7	done by Dr. Deborah Green, correct?
8	A. Correct.	8	A. Correct.
9	Q. So really, your opinion is based	9	Q. And can you go through the findings
10	solely on an aggravation of a pre-existing,	10	for me?
11	non-work-related injury of --	11	A. Sure.
12	MR. JOYCE: Objection. I think his	12	Q. And maybe put it into laymen's terms
13	report also talked about it being a	13	for me, if that's possible?
14	contributing factor, along with an	14	A. Sure.
15	aggravation of the condition.	15	Q. Okay. Maybe starting with C2-3, which
16	MR. HALL: You can answer the	16	is the first finding, is that correct?
17	question.	17	A. Disk is of normal height, meaning that
18	THE WITNESS: Can you restate it?	18	he hadn't lost any height. It diminished signal
19	MR. HALL: Sure.	19	intensity, meaning that the disk was dry, no bulge
20	Q. (By Mr. Hall) Your opinion is that	20	or herniation.
21	his job duties at the Railroad aggravated or	21	Q. Okay. And is diminished signal
22	worsened a pre-existing, non-work-related	22	intensity or dryness something that's typical of
23	condition, is that correct?	23	age-related --
24	A. That's correct.	24	A. Yes.

Robert Scott Cowah, MD
December 16, 2008

Page 66	Page 68
<p>1 Q. How did you assess Mr. Crowther's 2 surgery, in terms of what you did with the AMA? 3 A. Well, I assessed that he did well. He 4 didn't have persistent radicular findings, 5 weakness or numbness. But just based on the 6 surgery, that's how the AMA guideline worked for 7 that particular --</p> <p>8 Q. And is this the best possible 9 impairment rating you can get, having neck 10 surgery?</p> <p>11 A. Best in what sense?</p> <p>12 Q. Best in terms of the least amount of 13 disability.</p> <p>14 MR. JOYCE: Objection.</p> <p>15 Q. (By Mr. Hall) I mean, is this the 16 best possible outcome he could have on the AMA 17 guidelines, based upon the fact that he had 18 surgery because of a radiculopathy?</p> <p>19 A. I believe so. I think it's eighteen 20 to twenty-three percent.</p> <p>21 Q. So this is the best possible outcome 22 for him, based on the AMA guidelines, is that 23 correct?</p> <p>24 A. Correct.</p>	<p>1 A. Next July.</p> <p>2 Q. Oh, you saw him in July. I had -- I 3 apologize. So, like, a year and a half? Okay. 4 And in terms Mr. Crowther's other 5 orthopedic conditions, you would defer to the 6 other doctors who treated him in your practice, is 7 that right?</p> <p>8 A. That's right.</p> <p>9 Q. And that would also include the 10 disability ratings, as well?</p> <p>11 A. Correct.</p> <p>12 Q. And so is it your understanding that 13 he had excellent results or good results of those 14 issues, as well?</p> <p>15 A. I actually don't have notations, in 16 regards to either his thumb or his knees, so I 17 can't really say how he's done with respect to 18 either of those.</p> <p>19 Q. And you just defer to those doctors on 20 that?</p> <p>21 A. I do.</p> <p>22 Q. Okay. Your last exam -- I know we 23 talked a little bit about it being a good surgical 24 result. Did Mr. Crowther regain his full range of</p>
<p>1 Q. And people who have an eighteen- 2 percent, whole-body impairment rating can do 3 medium-type jobs?</p> <p>4 A. Sure.</p> <p>5 Q. Could they do heavy-type jobs?</p> <p>6 A. Hypothetically, sure.</p> <p>7 Q. Can you give me just a moment, and I 8 can review my notes?</p> <p>9 A. Sure.</p> <p>10 Q. Thank you. Do you have an opinion on 11 Mr. Crowther's long-term prognosis, in terms of 12 his neck?</p> <p>13 A. He should do fine.</p> <p>14 Q. When was the last time he went to see 15 you?</p> <p>16 A. Last seen by me July the 6th, 2007, I 17 believe.</p> <p>18 Q. And everything was satisfactory at 19 that point?</p> <p>20 A. Yes.</p> <p>21 Q. And you haven't seen him in almost two 22 years?</p> <p>23 A. It'll be two years next July.</p> <p>24 Q. Next January?</p>	<p>1 motion?</p> <p>2 A. Of --</p> <p>3 Q. His neck. I'm sorry.</p> <p>4 A. Typically, no. Most patients who have 5 a fusion lose some range of motion, but it's not 6 of any functional consequence.</p> <p>7 Q. And is that consistent with -- I'm 8 sorry. Is that how Mr. Crowther's case turned out 9 to be?</p> <p>10 A. Yes.</p> <p>11 Q. So any limitation on how he can rotate 12 his neck has no functional consequence?</p> <p>13 A. Correct.</p> <p>14 Q. And one of the things I did want to 15 ask you about -- and I apologize to go back -- but 16 do you have any information about Mr. Crowther's 17 exposure to vibration to his neck?</p> <p>18 A. I don't have any specifics on that, 19 no.</p> <p>20 Q. I'm just trying to figure out -- do 21 you have any information to say that he was 22 exposed to vibration in his neck?</p> <p>23 A. Only what's in Mr. Joyce's note here.</p> <p>24 Q. And in order for a vibration to affect</p>

Robert Scott Cowah, MD
December 16, 2008

Page 70	Page 72
<p>1 the neck, I mean, would you have to have direct 2 contact with some sort of vibrating source?</p> <p>3 A. Yes.</p> <p>4 Q. And would the contact have to be on 5 the spine itself?</p> <p>6 A. No. It could travel through the arms 7 or legs.</p> <p>8 Q. And have you made any assessment of 9 his vibration exposure at all?</p> <p>10 A. No.</p> <p>11 Q. And are you aware of the studies that 12 indicate that exposure to whole body vibration is 13 not causally related to the development of 14 musculoskeletal disorders of the neck?</p> <p>15 MR. JOYCE: Objection.</p> <p>16 Q. (By Mr. Hall) Are you aware of that?</p> <p>17 A. I'm not aware of any study with 18 respect to that.</p> <p>19 Q. Is the National Institute of 20 Occupational Safety and Health an authoritative 21 body?</p> <p>22 A. Yes.</p> <p>23 Q. And if they indicated, in a 24 publication regarding work-relatedness, that</p>	<p>1 that qualifies as a restriction that has 2 to do with all of his impairments; neck, 3 arm, knees. Was that what you were speaking 4 of?</p> <p>5 MR. HALL: Well, any particular 6 medical restrictions with regard to his 7 neck, because I think we agreed before that 8 you would defer to -- the disability ratings 9 -- to the other doctors who treated him.</p> <p>10 THE WITNESS: Well --</p> <p>11 Q. (By Mr. Hall) Is he disabled because 12 of his neck?</p> <p>13 MR. JOYCE: He already answered that 14 question yes.</p> <p>15 THE WITNESS: Yes, he's disabled with 16 regards to his neck. As I said, I think he 17 could go back to some work, but not his 18 previous line of work and duties.</p> <p>19 Q. (By Mr. Hall) Okay. And if we were 20 trying to figure out which job he could go and do, 21 are there any medical restrictions?</p> <p>22 A. Yes.</p> <p>23 Q. Could he, for instance, lift up to 24 twenty-five pounds or --</p>
<p>1 whole-body vibration exposure has not been 2 causally related -- there's insufficient evidence 3 to formulate a causal association between 4 whole-body vibration and the development of 5 musculoskeletal disorders of the neck and 6 shoulder -- would you agree with them and defer to 7 them?</p> <p>8 MR. JOYCE: Objection.</p> <p>9 THE WITNESS: Yes.</p> <p>10 Q. (By Mr. Hall) And you don't have any 11 independent scientific studies showing that 12 exposure to vibration causes degenerative disk 13 disease in the neck, do you?</p> <p>14 A. No.</p> <p>15 Q. Are you aware of any at all?</p> <p>16 A. No.</p> <p>17 Q. In terms of -- okay. Are there any 18 current medical restrictions on Mr. Crowther?</p> <p>19 A. No.</p> <p>20 Q. So as far as you're concerned, in 21 terms of his neck, he has no medical restrictions?</p> <p>22 MR. JOYCE: Objection.</p> <p>23 THE WITNESS: Well, I said he was 24 totally permanently disabled. I suppose</p>	<p>1 A. Yes.</p> <p>2 Q. -- fifty pounds?</p> <p>3 A. I would -- you know, once again, I 4 haven't seen him for a year and a half. And 5 probably the better way to judge this would be 6 something like a functional capacity evaluation.</p> <p>7 But I would say he would have lifting 8 restrictions. He would be best not doing overhead 9 work. He would be best not working in a stooped 10 position, and best not lifting below his knees or 11 crawling into tight, cramped spaces.</p> <p>12 Q. But in order to really make an 13 assessment, you need a functional capacity exam?</p> <p>14 A. I think it's helpful.</p> <p>15 Q. And you're not aware of Mr. Crowther 16 having a functional capacity exam, is that 17 correct?</p> <p>18 A. I am not.</p> <p>19 Q. And you didn't do a functional 20 capacity exam before doing your percentage or 21 calculation on his impairment, is that correct?</p> <p>22 A. No. It wouldn't have figured in.</p> <p>23 MR. HALL: Okay. I don't think I have 24 any other questions.</p>

Robert Scott Cowah, MD
December 16, 2008

Page 74	Page 76
1 MR. JOYCE: Just real briefly. 2 EXAMINATION 3 Q. (By Mr. Joyce) Dr. Cowan, in your 4 opinion, Geoff's job as a trackman at the Railroad 5 was a contributing factor in the development of 6 his degenerative disk disease in his neck? 7 MR. HALL: Objection. 8 THE WITNESS: Yes. 9 Q. (By Mr. Joyce) In your opinion, 10 Geoff's job as a trackman at the Railroad 11 aggravated and worsened his degenerative disk 12 disease in his neck? 13 A. Yes. 14 MR. HALL: Objection. 15 Q. (By Mr. Joyce) In your opinion, Geoff 16 is occupationally disabled from working as a 17 trackman at the Railroad as to his cervical 18 condition? 19 MR. HALL: Objection. 20 THE WITNESS: Yes. 21 MR. JOYCE: Those are all the 22 questions I have. Thank you. 23 EXAMINATION 24 Q. (By Mr. Hall) Let me ask you a	1 saying that the work caused the degenerative 2 disk disease. He's saying that the work was 3 a contributing factor. Is that what you're 4 getting at? 5 MR. HALL: No. You can answer my 6 question. Go ahead. 7 THE WITNESS: All right. I believe 8 that Mr. Crowther would have developed 9 degenerative disk disease to his neck 10 independent of work. 11 Q. (By Mr. Hall) All right. And so your 12 opinion is solely that there was an aggravation of 13 a pre-existing, non-work-related condition, is 14 that correct? 15 A. That's correct. 16 Q. And we talked about aggravation and 17 worsening and we agreed that there are two 18 concepts that are involved there, the worsening or 19 aggravation of symptoms versus aggravation and 20 worsening of the actual disease process, correct? 21 A. Correct. 22 Q. And from when you evaluated him in 23 March of '06, to when he had his surgery in 24 January of '07, you didn't see a worsening of the
Page 75	Page 77
1 follow-up, because you told me on the record that 2 the paragraph regarding your opinion was solely to 3 an aggravation. 4 A. Correct. 5 Q. Do you recall that testimony? 6 A. Yes. 7 Q. And so we can agree that his 8 degenerative disk disease was completely 9 non-work-related, correct? 10 MR. JOYCE: Objection. 11 Q. (By Mr. Hall) The development -- the 12 original development of his degenerative disk 13 disease was not related to his job -- 14 MR. JOYCE: Objection. 15 Q. (By Mr. Hall) -- is that correct? 16 MR. JOYCE: I think that that -- 17 Q. (By Mr. Hall) Is that correct? 18 MR. JOYCE: -- testimony speaks for 19 itself. 20 Q. (By Mr. Hall) You told me that it was 21 not caused by work, right? 22 MR. JOYCE: We're not -- there's a 23 distinction between "caused" and "a 24 contributing factor" here, Steve. He's not	1 actual disease process, is that correct? 2 A. That is correct. 3 Q. And so in terms of his work from that 4 time period, from -- I believe it was March of '06 5 -- until he went off in January and had surgery, 6 his job didn't change his degenerative disk 7 disease, correct? 8 A. It did not appear to change his disk 9 disease, correct. 10 Q. And in terms of his symptoms, did you 11 note any increasing symptoms from his -- from the 12 time period of March of '06 until January of '07? 13 A. I did not. 14 Q. So in terms of his job duties creating 15 any problems, in your opinion, there wasn't any 16 problems created from at least March of '06, until 17 the time he had surgery in '07? 18 A. I didn't see any change, no. 19 Q. Okay. And you also agree that Mr. 20 Crowther could do some sort of light, medium, or 21 medium-duty work, correct, based on his current 22 condition right now? 23 A. No. Only based on his neck. In sum 24 total with his knees and his other issues, I will

20 (Pages 74 to 77)

CATUOGNO COURT REPORTING & STEN-TEL TRANSCRIPTION
 Springfield, MA Worcester, MA Boston, MA Lawrence, MA Providence, MA

dc0b73ff-8352-4ff1-995f-dfec308d8c6b